

REMARKS

Claims 1 to 11 are pending in this application of which claims 1, 5 and 8 are the independent claims. Favorable reconsideration and further examination are respectfully requested.

Claims 1 to 4 were rejected under 35 U.S.C. §102 as being anticipated McDunn (U.S. Patent No. 5,718,117)

Claim 1, as amended, is directed to a printed circuit board assembly. The assembly includes a first circuit board having a first device side. The first device side has a first portion configured to mount a first semiconductor device. The assembly also includes a second circuit board having a second device side. The second device side has a second portion configured to mount a second semiconductor device. The second circuit board is disposed in confronting parallel relationship to the first circuit board. The assembly further includes a border interposed between the first and second boards and disposed around the respective first and second portions. The border forms with the first and second boards a liquid-tight chamber containing the first and second semiconductor devices. The border includes an inlet to receive an electrically nonconducting liquid into the chamber and an outlet for discharging the liquid from the chamber.

The applied art is not understood to disclose or to suggest the foregoing features of claim 1. In particular, McDunn does not disclose or suggest a border that includes an inlet to receive an electrically nonconducting liquid into a chamber and an outlet for discharging the liquid from the chamber.

More specifically, McDunn discloses a border (12, 14) that includes an inlet to receive a liquid but he discloses an outlet for discharging liquid within the chamber (see FIG. 5 of McDunn). For at least the foregoing reason, McDunn does not disclose or suggest the border includes an inlet to receive an electrically nonconducting liquid into the chamber and an outlet for discharging the liquid from the chamber. Applicant believes that claim 1 is allowable.

Claims 5 to 7 were rejected under 35 U.S.C. §103 over McDunn in view of Kujawa et al. (U.S. Patent No. 6,731,327).

Claim 5, as amended, is directed to automatic test equipment. The Automatic test equipment includes a testhead adapted for being carried by a manipulator. The testhead includes a printed circuit board assembly, the circuit board assembly including a first circuit board having a first device side. The first device side has a first portion configured to mount a first semiconductor device. The assembly also includes a second circuit board having a second device side, the second device side having a second portion configured to mount a second semiconductor device. The second circuit board is disposed in confronting parallel relationship to the first circuit board. The assembly further includes a border interposed between the first and second boards and disposed around the respective first and second portions. The border forms with the first and second boards a liquid-tight chamber containing the first and second semiconductor devices. The border includes an inlet to receive an electrically nonconducting liquid into the chamber and an outlet for discharging the liquid from the chamber.

The applied art is not understood to disclose or to suggest the foregoing features of claim 5. In particular, neither McDunn nor Kujawa disclose or suggest a border including an inlet to receive an electrically nonconducting liquid into a chamber and an outlet for discharging the liquid from the chamber.

As presented above for claim 1, McDunn does not disclose or suggest that the border includes the inlet to receive an electrically nonconducting liquid into the chamber and the outlet for discharging the liquid from the chamber.

Kuwaja does not describe a border much less a border that includes an inlet or an outlet.

Accordingly, for at least the reasons indicated above, even if McDunn were combined with Kujawa, the resulting hypothetical combination would not disclose or suggest that the border includes the inlet to receive an electrically nonconducting liquid into the chamber and the outlet for discharging the liquid from the chamber. For at least this reason, claim 5 is believed to be allowable.

Claim 8 was rejected under 35 U.S.C. §103 over Azar (U.S. Patent No. 5,103,374).

Claim 8, as amended, is directed to a method. The method includes cooling electronic devices. Cooling the electronic devices includes mounting the electronic devices on confronting sides of a pair of printed circuit boards. The circuit boards are placed in a parallel stacked relationship. The method also includes interposing a border between the circuit boards and around the electronic devices. The border with the boards forms a liquid-tight chamber containing the electronic devices. The border includes an inlet to receive an electrically nonconducting liquid into the chamber and an outlet for discharging the liquid from the chamber.

Azar does not disclose or suggest interposing a border between the circuit boards and around the electronic devices to form a liquid-tight chamber containing the electronic devices. The border includes an inlet to receive an electrically nonconducting liquid into the chamber and an outlet for discharging the liquid from the chamber.

Azar does not disclose having a border. Even if the tubulators 32 are considered a border, the tubulators do not form with the boards (13 and 17) a liquid-tight chamber. Furthermore, the tubulators do not include an inlet or an outlet. For at least this reason, claim 8 is believed to be allowable.

Applicant submits that all dependent claims now depend on allowable independent claims.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Applicant submits that the entire application is now in condition for allowance. Such action is respectfully requested at the Examiner's earliest convenience.

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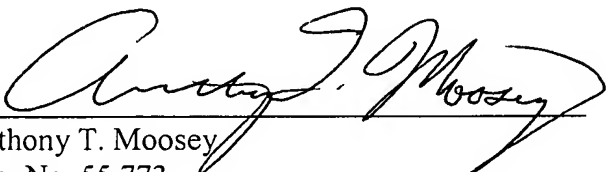
Attorney's Docket No.: 1619-US

All correspondence should be directed to the address below. Applicant's attorney can be reached by telephone at (617) 422-3532.

No fee is believed to be due for this Response; however, if any fees are due, please apply such fees to Deposit Account No. 20-0515 referencing Attorney Docket 1619-US.

Respectfully submitted,

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